

# JORDAN CREEK FEASIBILITY STUDY

A JOINT PROJECT WITH THE U.S. ARMY CORPS OF ENGINEERS

JORDAN VALLEY PARK RESOURCE DAY  
SEPTEMBER 9, 2008

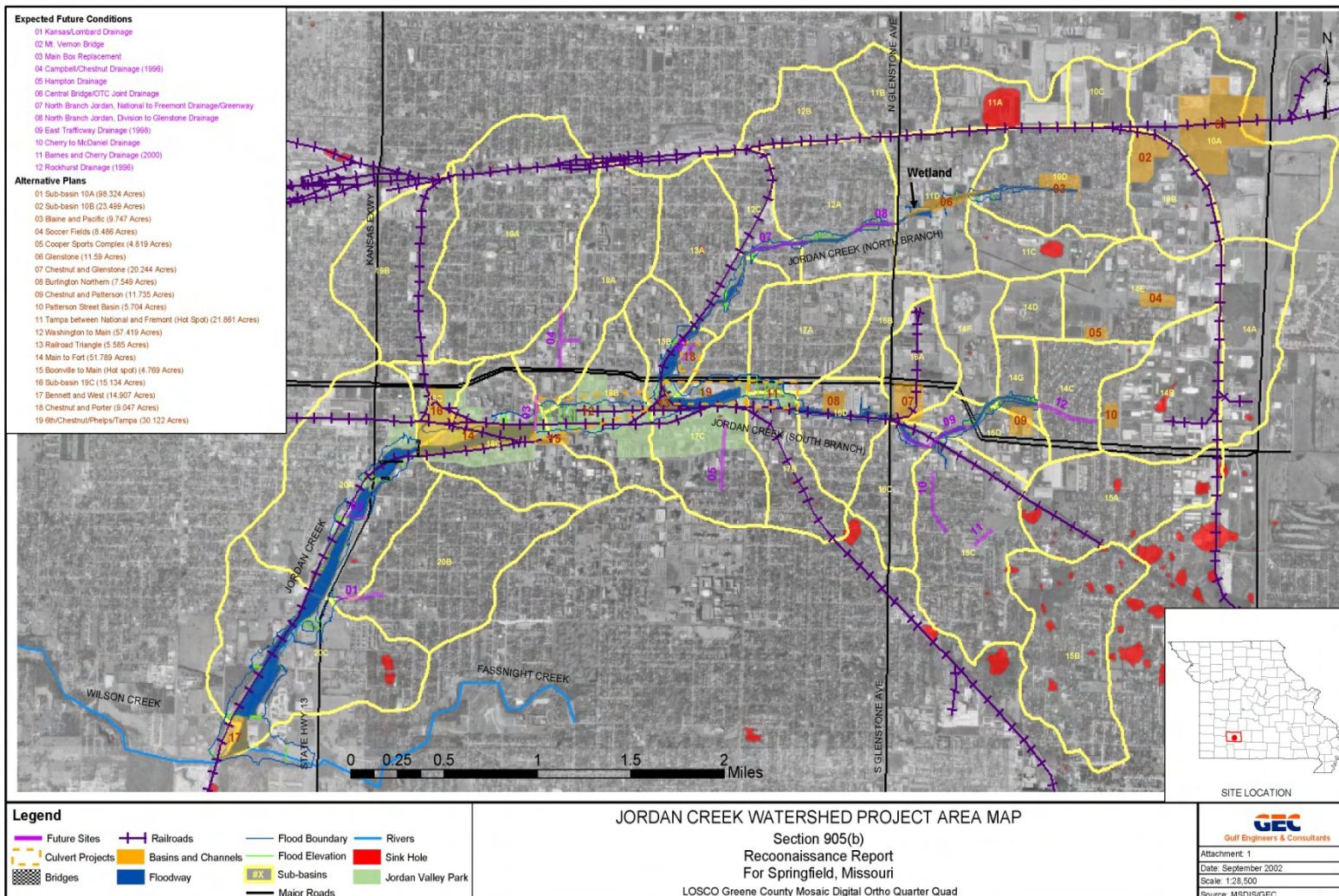


# PROJECT BACKGROUND

## JORDAN CREEK FEASIBILITY STUDY

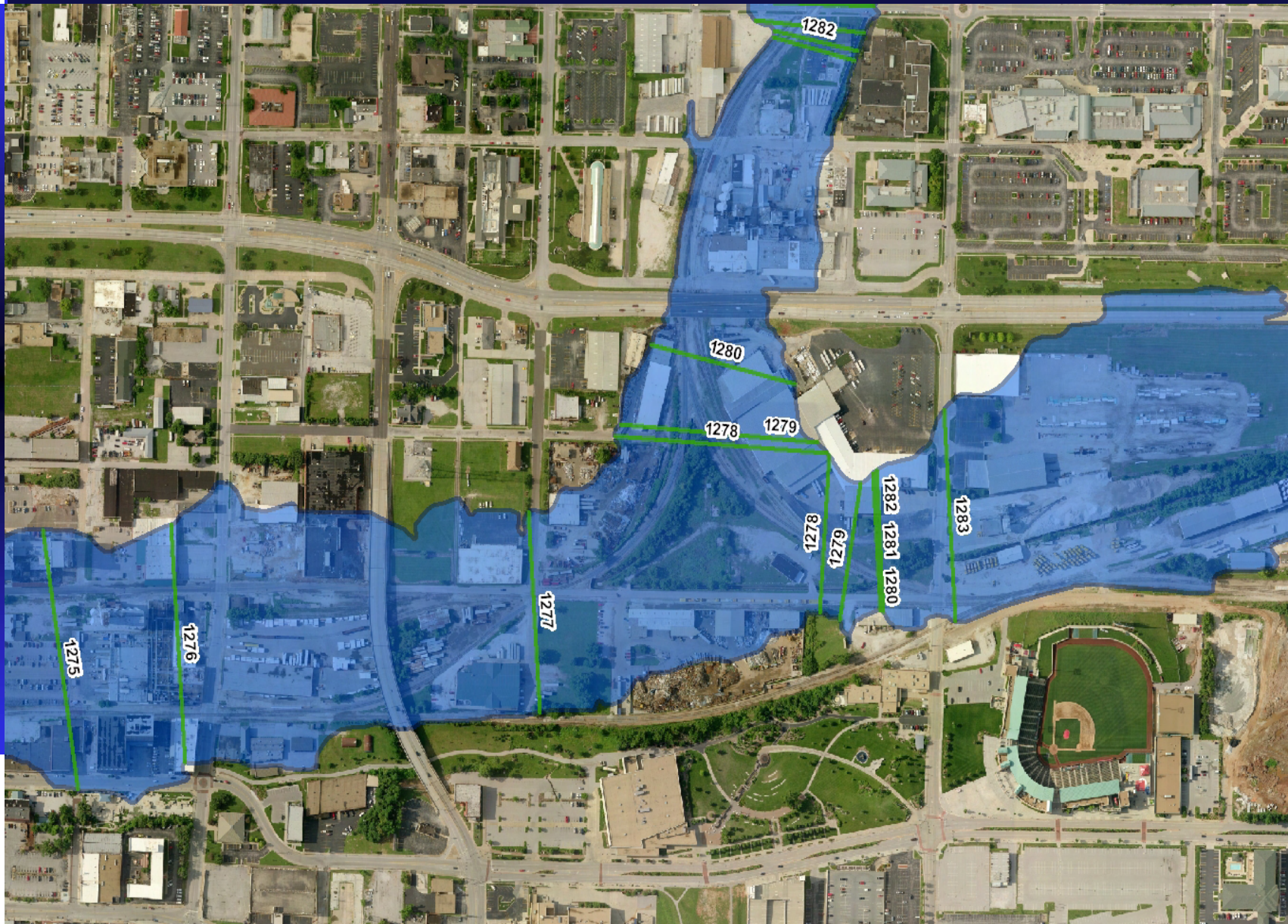
- FLOOD CONTROL
- ENVIRONMENTAL RESTORATION
- MINOR RECREATIONAL COMPONENT
- STUDY LENGTH IS ESTIMATED AT 4-5 YEARS
- STUDY COST IS ESTIMATED AT \$3 MILLION
- 50/50 COST SHARE BETWEEN CORPS AND CITY
- CITY IS PROVIDING SUPPORT INFORMATION: FLOOD STUDIES, WATER QUALITY ANALYSIS AND CULTURAL RESOURCE STUDY

# BACKGROUND STUDY





# FLOODPLAIN BOUNDARIES





# STUDY ELEMENTS STATUS

## COMPLETED TASKS

- CREEK MONITORING AND SAMPLING COMPLETE (MSU)
  - 18 MONTH MONITORING OF WATER CHEMISTRY
  - SAMPLING FOR NUTRIENTS, METALS AND HYDROCARBONS
- CULTURAL RESOURCES STUDY COMPLETE (MSU)
- FLOOD STUDIES UNDER EXISTING AND ULTIMATE CONDITIONS
  - FLOOD ELEVATION AND FLOODPLAIN DELINEATION FOR 1-YEAR TO 500-YEAR
- SURVEY OF OVER 1,000 BUILDING FLOOR ELEVATIONS NEAR THE 500-YEAR FLOODPLAIN COMPLETED
- GEOTECHNICAL BORINGS
- INITIAL ECONOMIC ANALYSIS (WHERE AND HOW MUCH ARE DAMAGES?)

# PRELIMINARY DAMAGE ESTIMATES

DAMAGES ESTIMATED FOR 10-, 25-, 50-, 100-, 500-YEAR

SINGLE EVENT DAMAGES OF \$33M FOR 100-YEAR FLOOD

55% LOWER JORDAN

12% NORTH BRANCH

33% SOUTH BRANCH

ANNUALIZED DAMAGES OF \$4.7M

19% COMMERCIAL

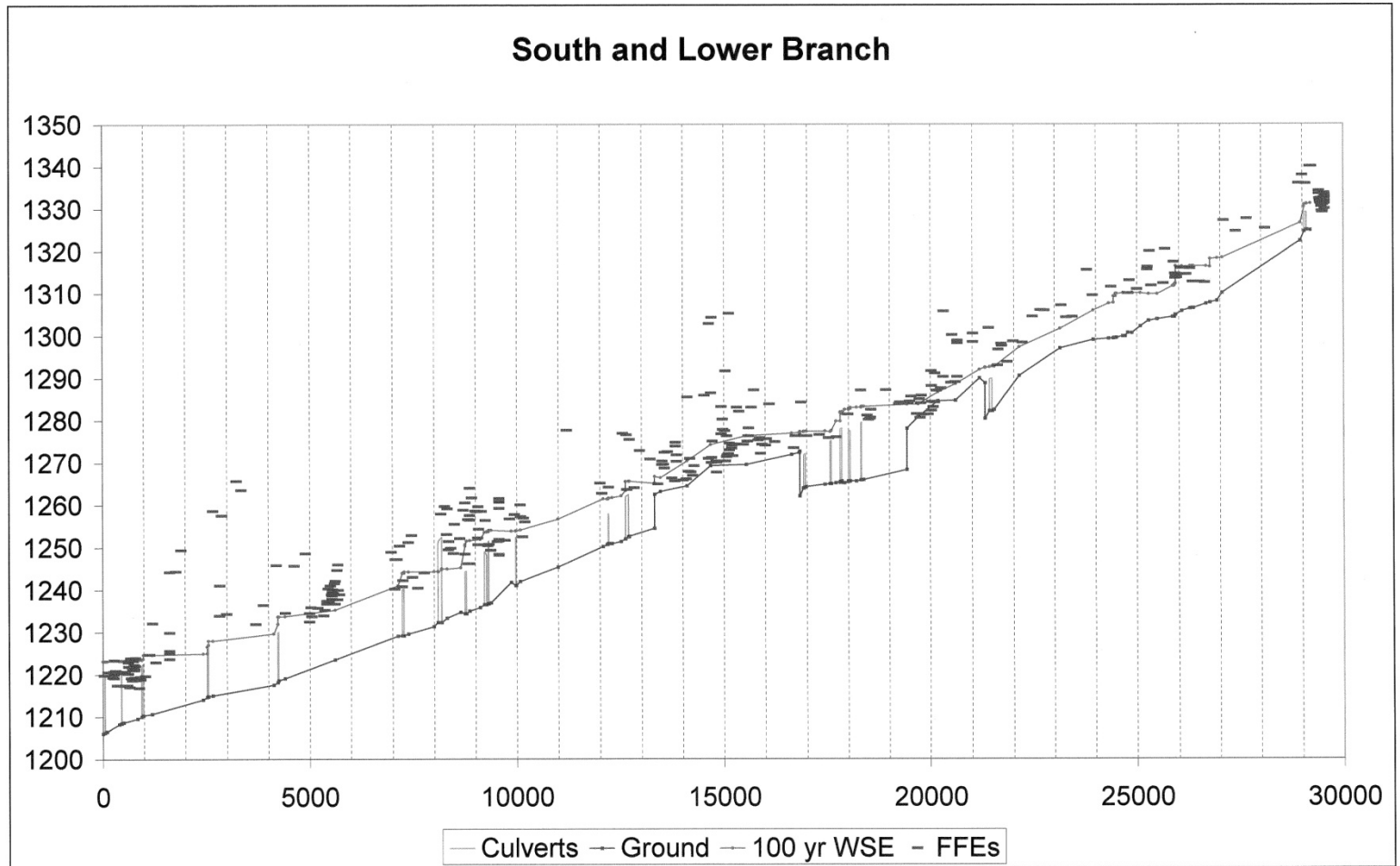
74% INDUSTRIAL

6% PUBLIC

0.2% RESIDENTIAL



# FLOOD ANALYSIS



# POTENTIAL FLOOD DAMAGES



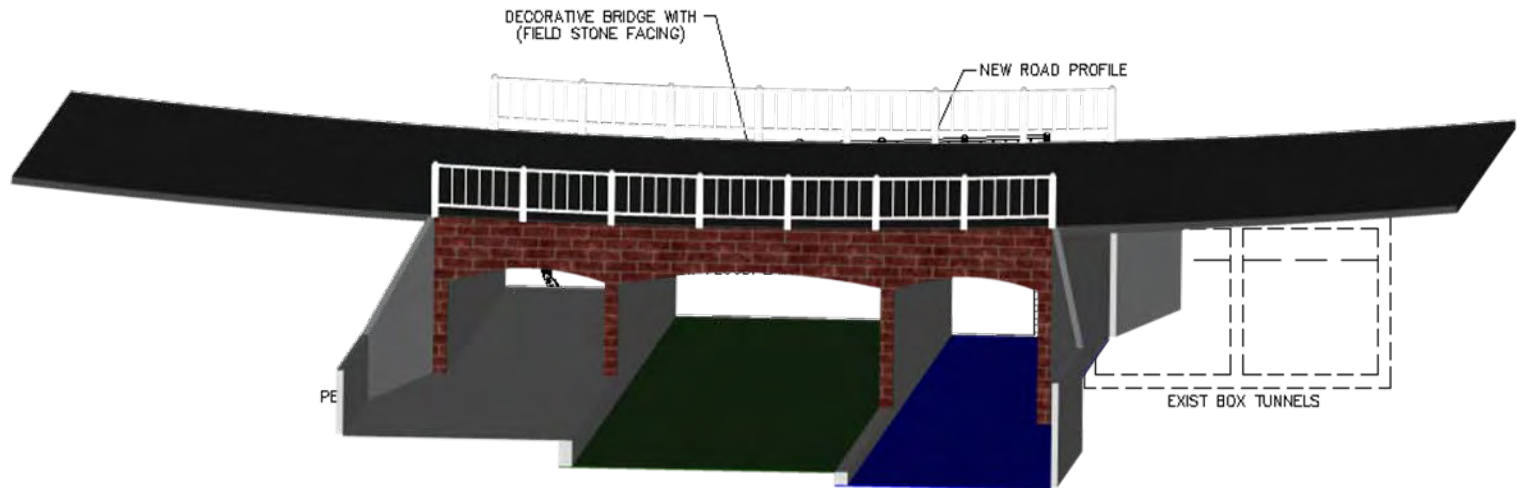


# PRELIMINARY ALIGNMENT



# PRELIMINARY CROSS SECTIONS

## TYPICAL ROAD CROSSING (MAIN, CAMPELL & BOONVILLE)





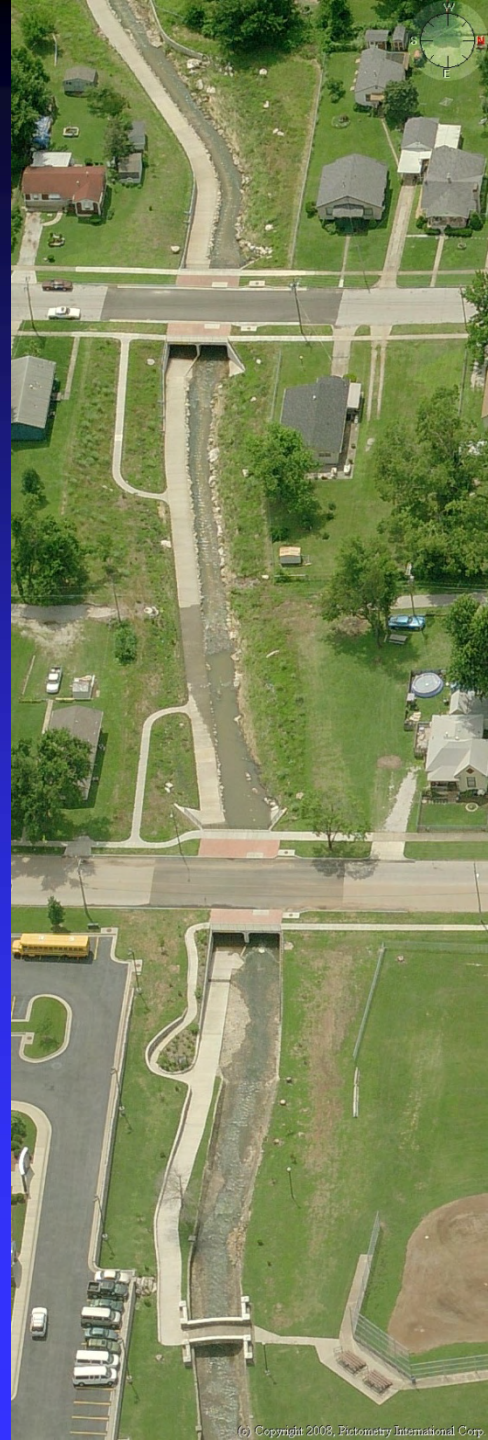
# SIMILAR PROJECTS



# FUTURE CHALLENGES

- CONTINUED CONGRESSIONAL SUPPORT
- ENVIRONMENTAL CLEANUP COSTS – EPA TARGETED  
BROWNFIELD ASSESSMENTS
- LOCAL MATCH FOR DESIGN AND CONSTRUCTION (35-45%)
- CONSIDER CITY CONSTRUCTING DETENTION BASINS
- STAKEHOLDER AGREEMENT ON ALIGNMENT
- TIMING OF PROJECT VS. RR RECONFIGURATION
- PUBLIC “BUY IN” AND SUPPORT





**CITY OF SPRINGFIELD**  
**DEPARTMENT OF PUBLIC WORKS**  
**STORM WATER SERVICES**  
**[WWW.SPRINGFIELDMO.GOV/STORMWATER](http://WWW.SPRINGFIELDMO.GOV/STORMWATER)**



